
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2010; month=7; day=21; hr=6; min=38; sec=33; ms=951;]

Validated By CRFValidator v 1.0.3

Application No: 10559758 Version No: 4.0

Input Set:

Output Set:

Started: 2010-07-20 11:54:45.552

Finished: 2010-07-20 11:54:48.742

Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 190 ms

Total Warnings: 62
Total Errors: 0

No. of SeqIDs Defined: 62

Actual SeqID Count: 62

Error code		Error Description									
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(1)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(2)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(3)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(4)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(5)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(6)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(7)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(8)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(9)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(10)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(11)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(12)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(13)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(14)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(15)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(16)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(17)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(18)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(19)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(20)

Input Set:

Output Set:

Started: 2010-07-20 11:54:45.552 **Finished:** 2010-07-20 11:54:48.742

Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 190 ms

Total Warnings: 62
Total Errors: 0

No. of SeqIDs Defined: 62

Actual SeqID Count: 62

Error code Error Description

This error has occured more than 20 times, will not be displayed

SEQUENCE LISTING

```
<110> Hart, Stephen Lewis
      Writer, Michele
<120> PEPTIDE LIGANDS
<130> ABL-012.1P US
<140> 10559758
<141> 2010-07-20
<150> GB 03 13132.3
<151> 2003-06-06
<150> PCT/GB2004/002421
<151> 2004-06-07
<160> 62
<170> PatentIn version 3.5
<210> 1
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = any amino acid residue, Xaa at position <math>3 = a
      ny amino acid residue, Xaa at position 4 = any amino acid residue
<400> 1
Pro Xaa Xaa Xaa Thr
<210> 2
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa at position 3 = any amino acid residue
```

```
Pro Ser Xaa Ser
<210> 3
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = any amino acid, Xaa at position 3 = any amino
      acid having an amide side chain, Xaa at position 4 = any amino a
      cid
<400> 3
Gln Xaa Xaa Xaa Gln
<210> 4
<211> 3
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue having an aliphatic si
      de chain
<400> 4
Ser Xaa Ser
<210> 5
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
```

<400> 2

```
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue
<400> 5
Pro Xaa Leu Xaa Thr
<210> 6
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 6
Pro Ala Leu Lys Thr
<210> 7
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue
<400> 7
Pro Xaa Asn Xaa Thr
```

```
<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 8
Pro Ser Asn Ser Thr
<210> 9
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 9
Pro Pro Asn Thr Thr
<210> 10
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = any amino acid residue, Xaa at position <math>3 =
       an y amino acid residue, Xaa at position 4 = any amino acid
       residue
<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Xaa at position 6 = any amino acid resdue
<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Xaa at position 6 = any amino acid residue
<400> 10
```

1 5

```
<210> 11
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Xaa at position 6 = any amino acid residue
<400> 11
Pro Xaa Leu Xaa Thr Xaa
              5
<210> 12
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Xaa at position 6 = any amino acid residue
```

```
<400> 12
Pro Xaa Asn Xaa Thr Xaa
<210> 13
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa at position 1 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (3)..(5)
<223> Xaa at position 3 = any amino acid residue, Xaa at position <math>4 = a
      ny amino acid residue, Xaa at position 5 = any amino acid residue
<400> 13
Xaa Pro Xaa Xaa Xaa Thr
<210> 14
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa at position 1 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (3)..(5)
<223> Xaa at position 3 = any amino acid residue, Xaa at position <math>4 = a
       ny amino acid residue, Xaa at position 5 = any amino acid residue
<220>
<221> MISC_FEATURE
```

<222> (7)..(7)

<223> Xaa at position 7 = any amino acid residue

```
<400> 14
Xaa Pro Xaa Xaa Xaa Thr Xaa
<210> 15
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 15
Ala Pro Ser Asn Ser Thr Ala
<210> 16
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 16
Ser Pro Ala Leu Lys Thr Val
<210> 17
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 17
Ser Thr Pro Pro Asn Thr Thr
<210> 18
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Synthetic peptide binding to dendritic cells

<400> 18

```
<210> 19
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 19
Pro Ser Leu Ser
<210> 20
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (1)..(1)
\langle 223 \rangle Xaa at position 1 = Ala or Lys
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue
<400> 20
Xaa Pro Ser Xaa Ser
<210> 21
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 21
Ala Pro Ser Asn Ser
```

Pro Ser Asn Ser

```
<210> 22
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 22
Leu Pro Ser Leu Ser
<210> 23
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 23
Met Leu Pro Ser Leu Ser
<210> 24
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 24
Pro Met Leu Pro Ser Leu Ser
1 5
<210> 25
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 25
Ser Gln Lys Asn Pro Gln Met
```

```
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 26
Phe Gln Ser Gln Tyr Gln Lys
<210> 27
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 27
Met Ala Ser Ile Ser Met Lys
              5
<210> 28
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 28
Asp Trp Trp His Thr Ser Ala
<210> 29
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 29
Ser His Val Lys Leu Asn Ser
              5
```

<210> 26

```
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 30
Gln Leu Leu Thr Gly Ala Ser
              5
<210> 31
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 31
Thr Ala Arg Asp Tyr Arg Leu
<210> 32
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 32
Phe Pro Arg Ala Pro His His
<210> 33
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 33
Ser Glu Trp Leu Ser Ala Leu
      5
<210> 34
<211> 7
```

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 34
Ile Gly Gly Ile Arg Arg His
<210> 35
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 35
Tyr Thr Met Glu Phe Asn Arg
<210> 36
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<400> 36
Pro Ala Ala Tyr Lys Ala His
        5
<210> 37
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = any amino acid residue, Xaa at position <math>3 = a
      ny amino acid residue, Xaa at position 4 = any amino acid residue
<220>
```

<221> MISC_FEATURE

```
<222> (6)..(6)
<223> Xaa at position 6 = Ala or Val
<400> 37
Pro Xaa Xaa Xaa Thr Xaa
<210> 38
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue,
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue,
<400> 38
Pro Xaa Asn Xaa Thr
<210> 39
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = \text{any amino acid residue}, Xaa at position 3 = A
      sn or Leu, Xaa at position 4 = any amino acid residue
<400> 39
Pro Xaa Xaa Xaa Thr
<210> 40
<211> 5
```

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position = Thr or Ser
<220>
<221> MISC_FEATURE
<222> (4)..(4)
\langle 223 \rangle Xaa at position 4 = Thr or Ser
<400> 40
Pro Xaa Asn Xaa Thr
<210> 41
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa at position 1 = Ala or Leu
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa at position 4 = any amino acid residue
<400> 41
Xaa Pro Ser Xaa Ser
<210> 42
<211> 5
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = any amino acid residue, Xaa at position <math>3 = A
      sn or Gln, Xaa at position 3 = any amino acid residue
<220>
<221> MISC_FEATURE
<222> (2)..(4)
<223> Xaa at position 2 = any amino acid residue, Xaa at position 3 =
      Asn or Gln, Xaa at position 4 = any amino acid residue
<400> 42
Gln Xaa Xaa Xaa Gln
<210> 43
<211> 3
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic peptide binding to dendritic cells
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa at position 2 = Leu or Ile
<400> 43
Ser Xaa Ser
<210> 44
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 44
5
                                 10
                                                   15
```

```
Gly Ala Cys Ser His Val Lys Leu Asn Ser Cys Gly
  20
         25
<210> 45
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 45
1 5
           10 15
Gly Ala Cys Ala Pro Ser Asn Ser Thr Ala Cys Gly
  20 25
<210> 46
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 46
1 5
                10
Gly Ala Cys Met Ala Ser Ile Ser Met Lys Cys Gly
    20
<210> 47
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 47
1 5
                 10
```

Gly Ala Cys Phe Pro Arg Ala Pro His His Cys Gly
20 25

```
<210> 48
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 48
10
1 5
Gly Ala Cys Asp Trp Trp His Thr Ser Ala Cys Gly
            25
     20
<210> 49
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 49
1 5
           10 15
Gly Ala Cys Arg Arg Glu Thr Ala Trp Ala Cys Gly
     20
<210> 50
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 50
1 5
            10 15
Gly Ala Cys Ala Thr Arg Trp Ala Arg Glu Cys Gly
    20
```

<210> 51 <211> 27

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 51
10
   5
Gly Ala Cys Arg Arg Glu Glu Trp Ala Cys Gly
        20
<210> 52
<211> 28
<212> PRT
<213> Artificial Sequence
<220>
<223> Peptide derivative of the invention
<400> 52
5
                   10
Gly Ala Cys Met Ala Ser Ile Ser Met Lys Cys Gln
                       25
        20
<210> 53
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> integrin-binding peptide
<400> 53
Arg Arg Glu Thr Glu Trp Ala
<210> 54
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> synthetic nucleic acid binding domain
<400> 54
```

```
10
<210> 55
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> hydrophobic spacer sequence
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> x = epsilon-amino hexanoic acid residue
<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> x = epsilon-amino hexanoic acid residue
<400> 55
Xaa Ser Xaa Gly Ala
    5
<210> 56
<211> 17
<212> DNA
<213> Artificial Sequence
<220>
<223> Primer
<400> 56
                                                             17
ccctcattag cgtaacg
<210> 57
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> control peptide
<400> 57
Ala Thr Arg Trp Ala Arg Glu
            5
```

```
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide encoding peptide ligand

<400> 58
ccggaagcca cgtcaagctg aacg
```